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## STATE OF MICHIGAN DEPARTMENT OF LABOR & ECONOMIC GROWTH LANSING

ROBERT W. SWANSON DIRECTOR

January 8, 2007

TO:

Members of the Michigan Construction Code Commission

FROM:

Irvin J. Poke

SUBJECT:

Request for Interpretation by City of Birmingham

Michigan Building Code Section 705.6.1

Question:

Are the requirements of the Michigan Building Code (MBC) Section 705.6.1

applicable to buildings with differing roof heights if they are on separate lots?

Answer:

Yes.

Discussion:

A 5 story building abuts a 2 story building at the property line creating a zero fire separation distance for both buildings. The exterior walls of both buildings are required to comply with the fire resistance ratings prescribed in MBC Section 602.1 and Table 602. Footnote c in Table 602 refers the user to Section 503.2 for party walls. Section 503.2 states that party walls shall be constructed in accordance with Section 705.

The walls of the two buildings with zero separation meet all the criteria of MBC Section 705 for fire walls and are defined as a double fire wall in accordance with the NFPA 221 Standard for Fire Walls and Fire Barrier Walls, Section 2.5. Given that all the requirements of Section 705 are met by this assembly it separates the two buildings on separate lots in the same manner as a party wall.

In Chapter 2 of the MBC the definition of "Fire Separation Distance" is:

The distance measured from the building face to the closet interior lot line, to the centerline of a street, alley or public way, or to an imaginary line between two buildings on the lot. The distance shall be measured at right angles from the face of the wall.

This definition establishes equality between an interior property and an imaginary line for the purpose of fire separation distance. Therefore, fire separation distance is viewed the same for buildings on separate lots and buildings on the same lot.

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Michigan Building Code Section 704 regulates exterior walls. Openings in exterior walls are regulated by MBC Section 704.8 and Table 704.8, which is based on fire separation distance. For exterior walls with zero fire separation distance footnote e in Table 704.8 states: "For requirements for fire walls for buildings with differing roof heights, see Section 705.6.1."

This explicitly refers the code user to MBC Section 705.6.1 for the situation described since the assembly on the lot line is a fire wall. The requirements in this section allow openings in the portion of the wall that is more than 30 inches above the lower roof. The language of MBC Section 705.6.1 is as follows:

705.6.1 Stepped buildings. Where a fire wall serves as an exterior wall for a building and separates buildings having different roof levels, such wall shall terminate at a point not less than 30 inches (762 mm) above the lower roof level, provided the exterior wall for a height of 15 feet (4572 mm) above the lower roof is not less than 1-hour fire-resistance-rated construction from both sides with openings protected by assemblies having a <sup>3</sup>/<sub>4</sub>-hour fire protection rating.

**Exception:** Where the fire wall terminates at the underside of the roof sheathing, deck or slab of the lower roof, provided:

- 1. The lower roof assembly within 10 feet (3048 mm) of the wall has not less than a 1-hour fire-resistance rating and the entire length and span of supporting elements for the rated roof assembly has a fire-resistance rating of not less than 1 hour.
- 2. Openings in the lower roof shall not be located within 10 feet (3048 mm) of the fire wall.

Conclusion:

The provisions stated above are not restricted by the code from being applied to a situation with 2 buildings on separate lots. Therefore, MBC Section 705.6.1 is applicable to buildings on separate lots with differing roof heights, and the ICC Commentary supports this interpretation.

Approved by the Michigan Construction Code Commission January 10, 2007